

# Private Governance

EES 3310/5310

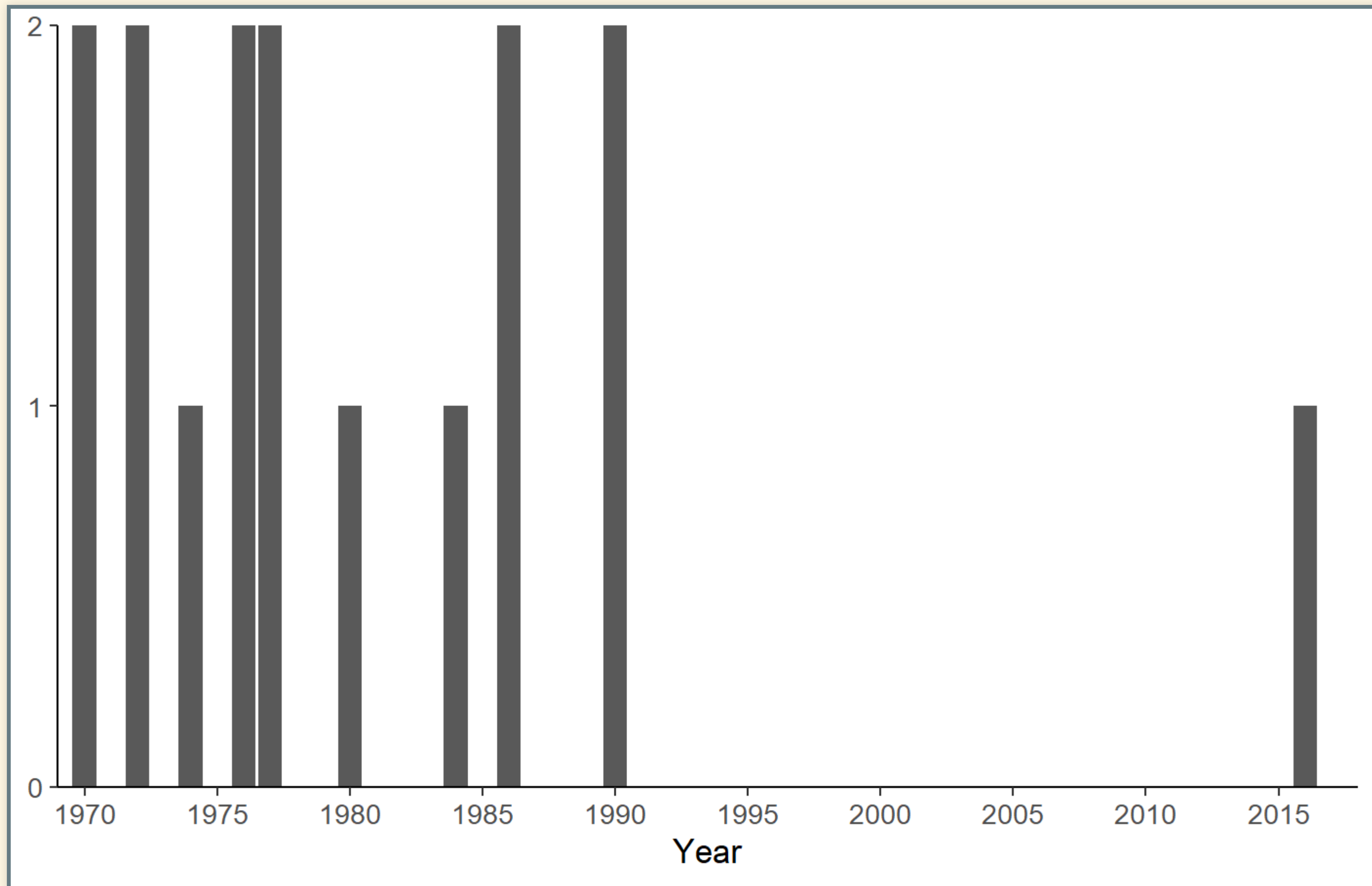
Global Climate Change

Jonathan Gilligan

Class #38: Wednesday April 15 2020

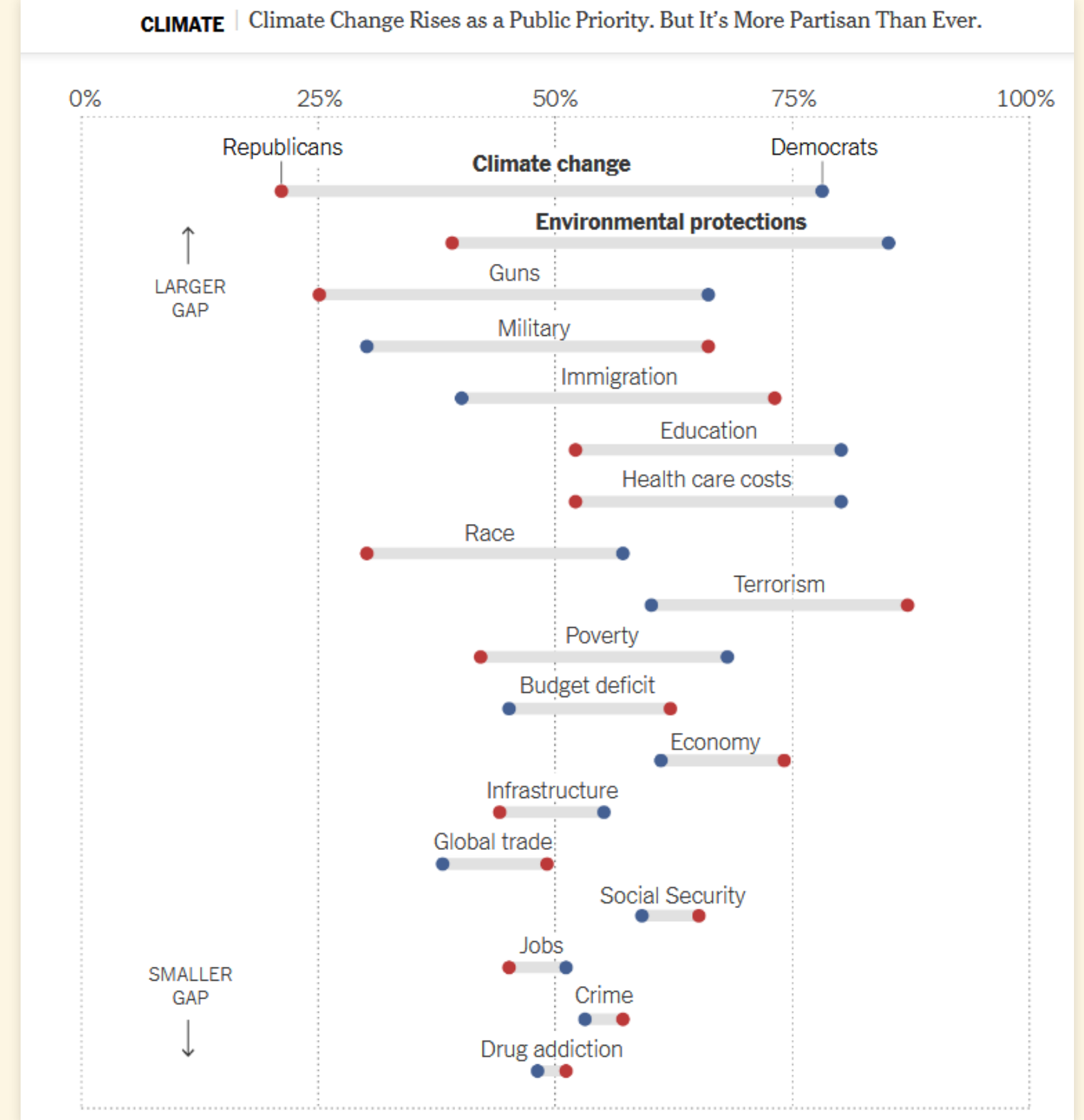
# Obstacles to Public Governance

# Major Pollution-Control Statutes



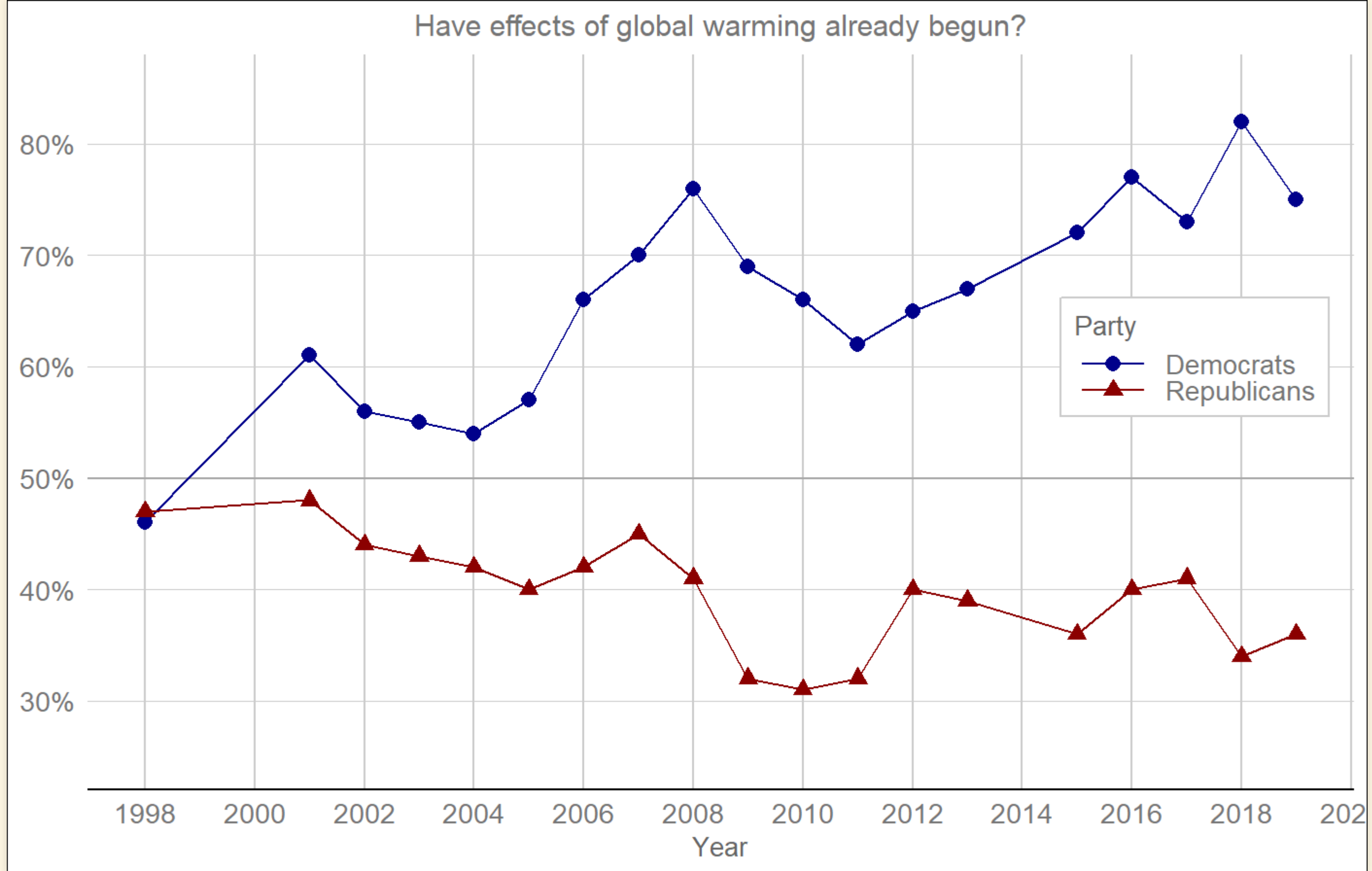
# Partisan Split:

- Climate policy is the most divisive issue
- Greater partisan polarization than abortion



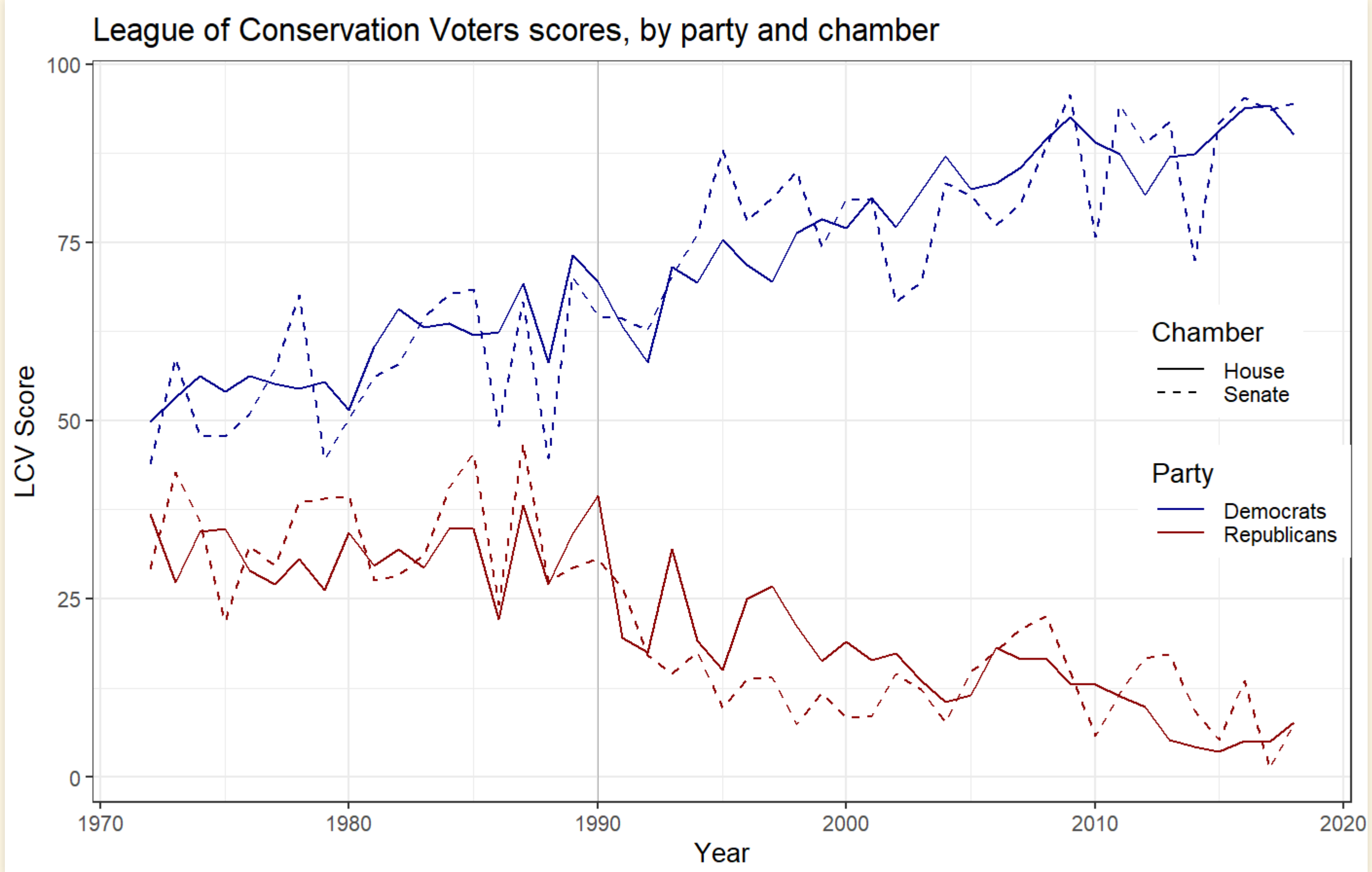
Pew: As Economic Concerns Recede, Environmental Protection Rises on the Public's Policy Agenda

# Partisan Split on Science



Gallup: Americans' Views on Global Warming, 2019, U.S. Concern About Global Warming at Eight-Year High (2016) Republican Skepticism Toward Global Warming Eases (2013),

# Polarization in Congress 1970–2015



# Problems Are Deeper than Partisanship

- Public distrust of “big government”:
  - 67% of the public think *big government* is a greater threat to the nation than *big business* or *big labor*.
    - 81% of Republicans
    - 67% of Independents
    - 51% of Democrats

Gallup, "Americans Still See Big Government as Top Threat (2017)"



Photo credit: Michael Gerrard

# Psychological Heuristics

- Solution aversion:

*If a solution is unpalatable, deny the problem exists.*

- Motivated reasoning:

*Desire to reach a certain conclusion leads to biased and selective examination of evidence*

- Cultural cognition:

*Credibility of expertise depends on perception of shared values.*

*Trust is based on feeling someone would understand what's important to you.*

*Someone who shares your cultural roots.*



# Solution Aversion

*I assumed like everybody else, way back when everyone was talking about global warming and all that, I assumed that that was probably right until I found out what it was going to cost. — Sen. James Inhofe*

Jack Fitzpatrick, "Inhofe Thought Climate Science Was 'Probably Right' Before He Saw Price Tag." *Morning Consult*, Dec. 8, 2016.

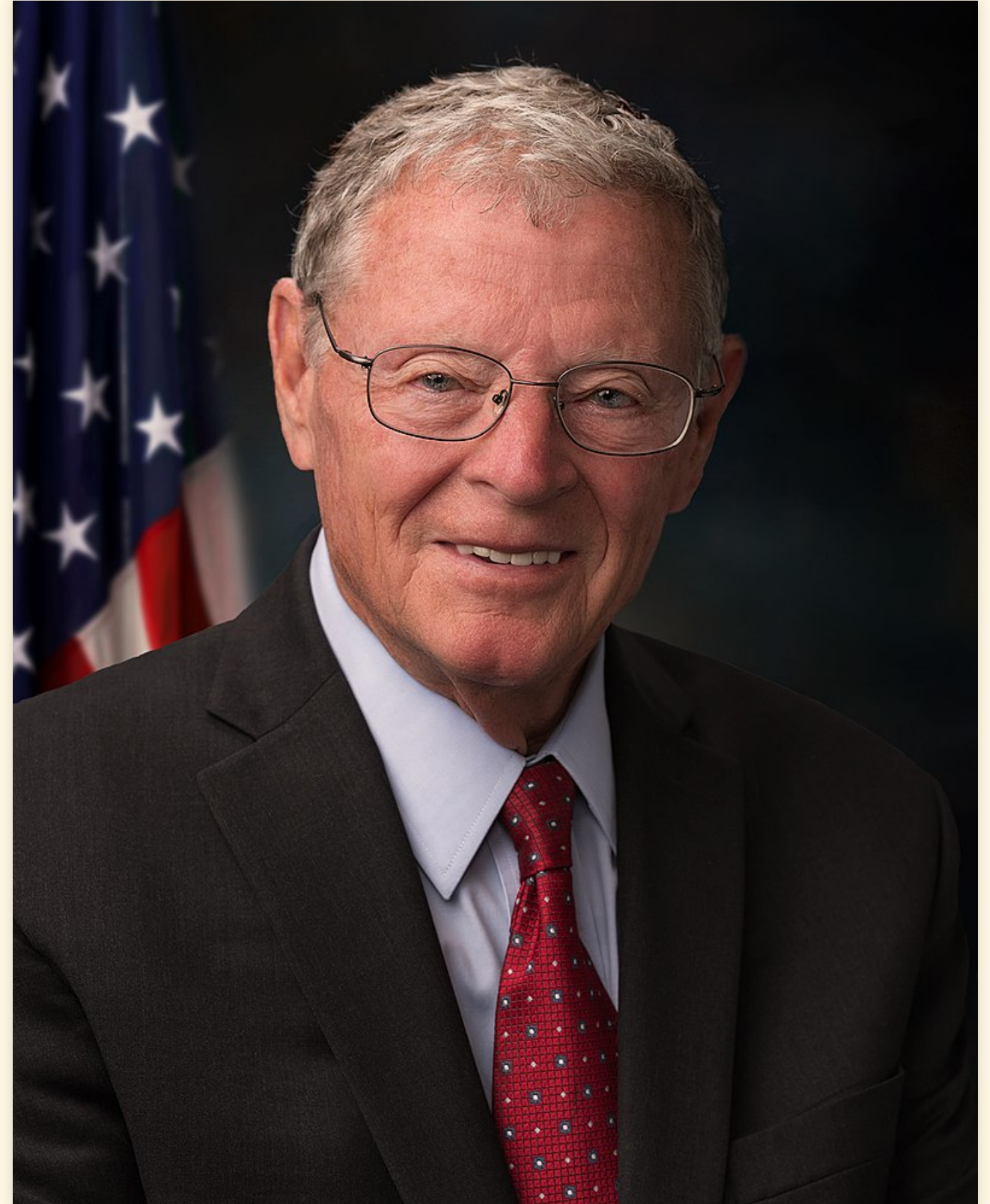


Photo credit: U.S. Senate Photography

# Problems with Policy Approach So Far

- Focus on **best** solutions (e.g., carbon tax)
- Emphasis on how well it will work when put into practice
- Neglects how hard it is to get government to adopt best solutions
  - “Political opportunity cost”
- Second-best or third-best may be easier to enact quickly

*A good plan violently executed now is better than a perfect plan executed next week  
—Gen. George Patton, attrib.*

# Private Governance

# Private Environmental Governance

- **Actor:**
  - Government → Private organization
- **Action:**
  - Law, policy → Private initiative

# Examples of Private Environmental Governance

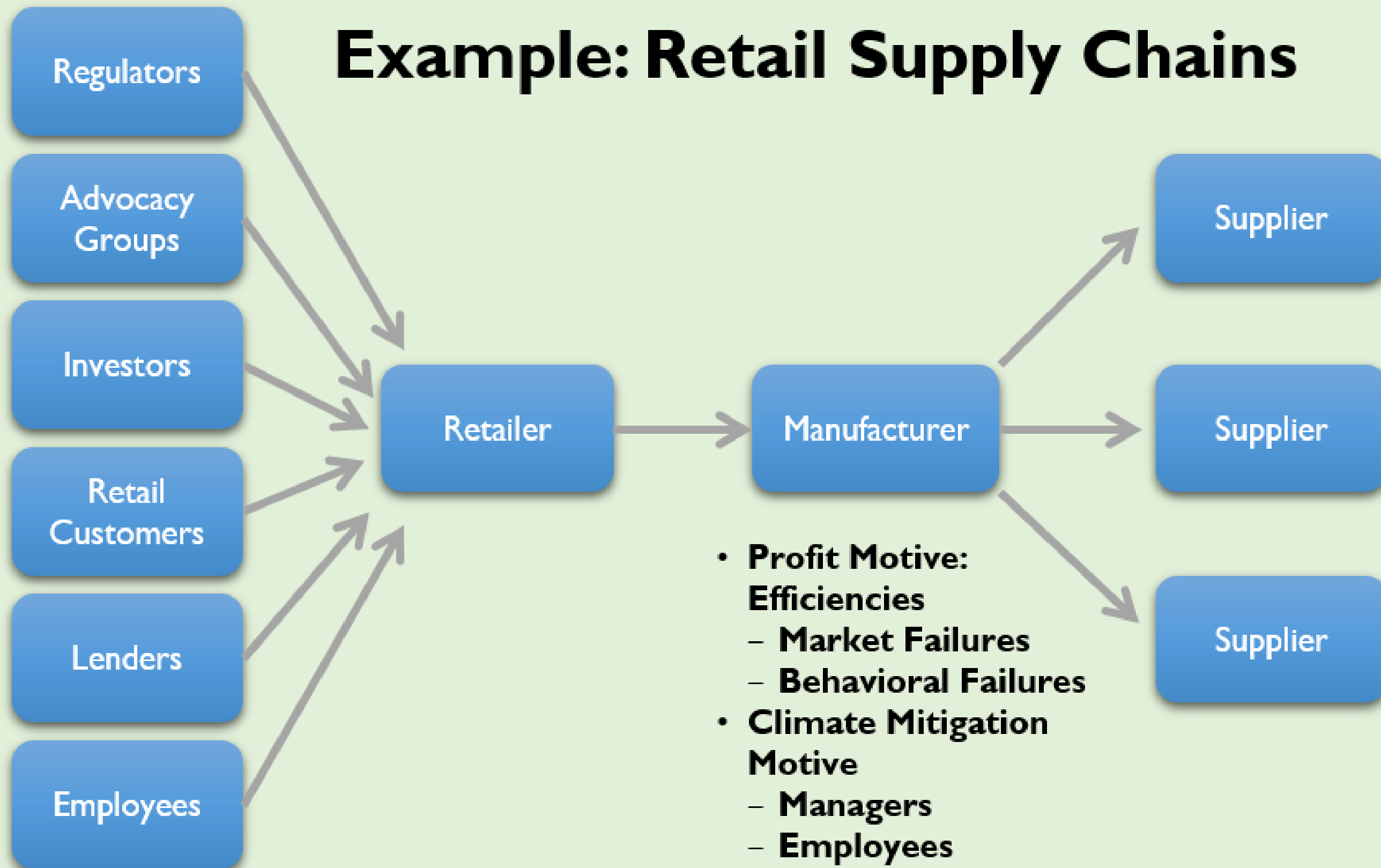
- **Institutions**

- Marine Stewardship Council (10% of all fish sold)
- Forest Stewardship Council (14% of all lumber & wood products)
- Carbon Disclosure Project

- **Practices**

- Supply-Chain contracting requirements
  - More than 125 large corporate buyers, with >\$3.6 trillion in procurement, reduced supply-chain emissions by more than 640 million tons CO<sub>2</sub>.
  - More than 1/3 of those suppliers are pressuring *their* suppliers to cut emissions.
  - Walmart & Target regulate toxic chemicals far more strictly than the government does.
- Internal carbon taxes
  - 517 companies, including Microsoft, Novartis, Yale University,

# Example: Retail Supply Chains



# Motives

- Self-interest
  - Financial gains from efficiency
  - Third-party pressure
    - Value of reputation
- Beyond self-interest
  - Support for climate action
  - Sense of responsibility (individual & org)

# Corporate Initiatives

- Carbon Disclosure Project (CDP)
  - Used by >500 investors with ~\$100 Trillion (pension funds, etc.)
- Participation:
  - Participating companies reduced their emissions by 522 million tons CO<sub>2</sub>e in 2018
- Around half of S&P 500 have set climate or clean-energy targets



# Specifics

- WalMart pledged 1 billion tons CO<sub>2</sub>e emissions cuts through 2030
- Microsoft has been 100% carbon neutral since 2012
  - Pledged to remove all its past CO<sub>2</sub> emissions by 2050
- In 2017 Shell oil pledged 50% reduction of emissions by 2050
  - Includes emissions from “energy products” it sells (oil, etc.)

# Policy Analysis for Private Governance

# Principles of Private Governance Analysis

- **Technical Potential**

*Reduction if everyone takes action*

- **Behavioral Plasticity**

*What fraction of actors would take action with appropriate incentives?*

- **Policy Plasticity**

*Potential for public or private actors to provide incentives*

# Corporate Pressure to Adopt Green Energy

- Major cloud computing companies are aggressively cutting emissions:
  - Improving energy efficiency of data farms
    - Cloud computing is 100 times more energy efficient than 10 years ago
  - Powering data farms with renewable electricity
- In the Southeast, state laws & utility regulations are often hostile to renewables
- Amazon, Google, Facebook, etc. have pressured North Carolina & Virginia to change regulations to be more favorable to renewables
- Pressure Duke Power, Dominion Power to build hundreds of megawatts of new solar and wind power.
  - Dominion Power just announced that it was giving up its plans to expand natural gas generation.

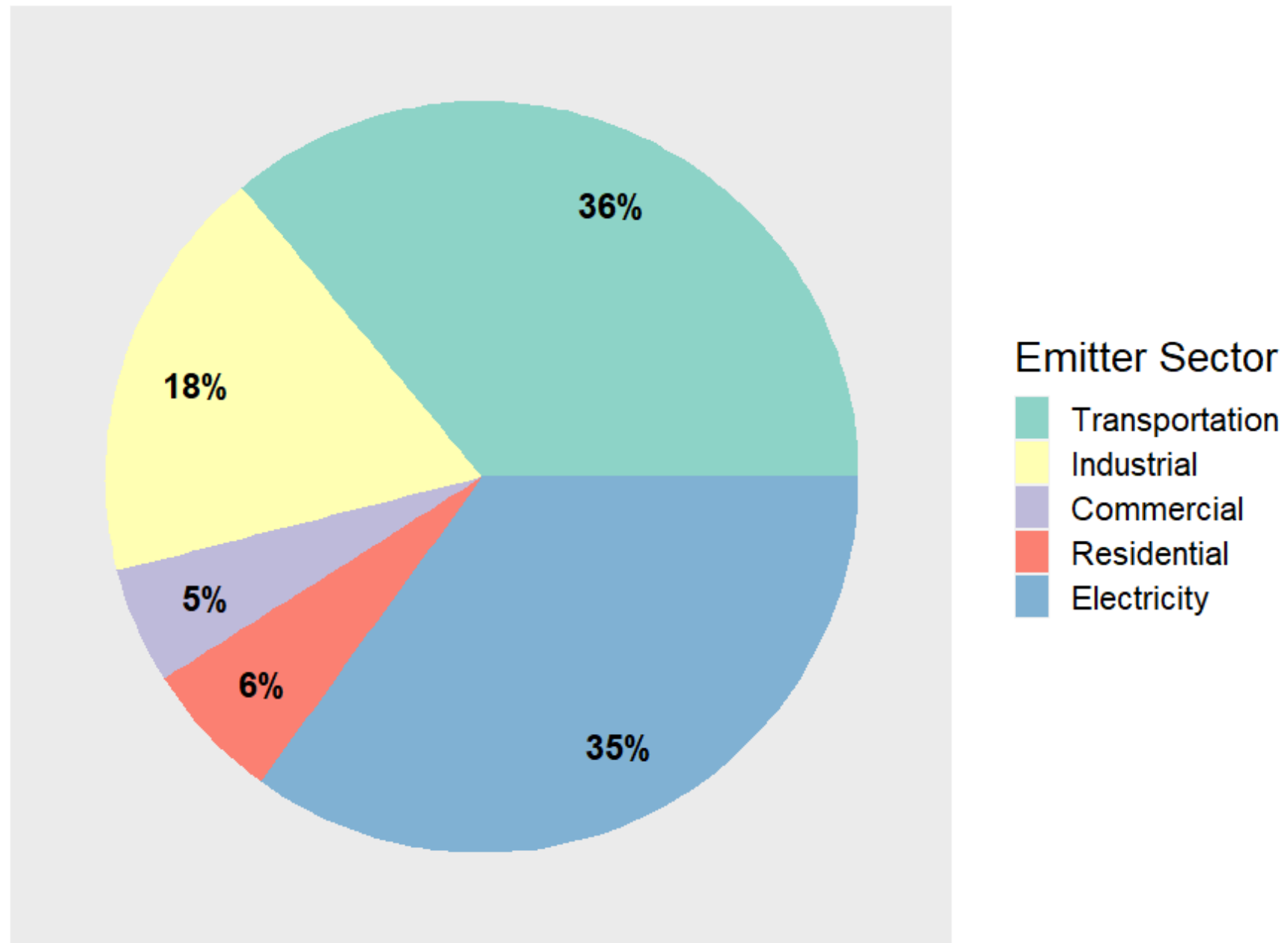
# Diet and Climate

- Livestock produce 14–18% of greenhouse gas emissions
  - Beef and lamb are much worse than other kinds of meat
- Employers motivating employees to eat less meat:
  - WeWork requires all business meals to be vegan
  - Copenhagen Business School makes vegetarian meals the default.
    - Employees can opt-out and order meat
    - 90% of meals were vegetarian
    - Employees voted to keep the program
  - Google is studying what motivations work best to reduce employee meat consumption
  - Burger King, White Castle, other chains add meatless burgers
- Plant-based products could replace 10% of global meat market by 2030
  - This would reduce emissions by 750 million tons CO<sub>2</sub>-equivalent

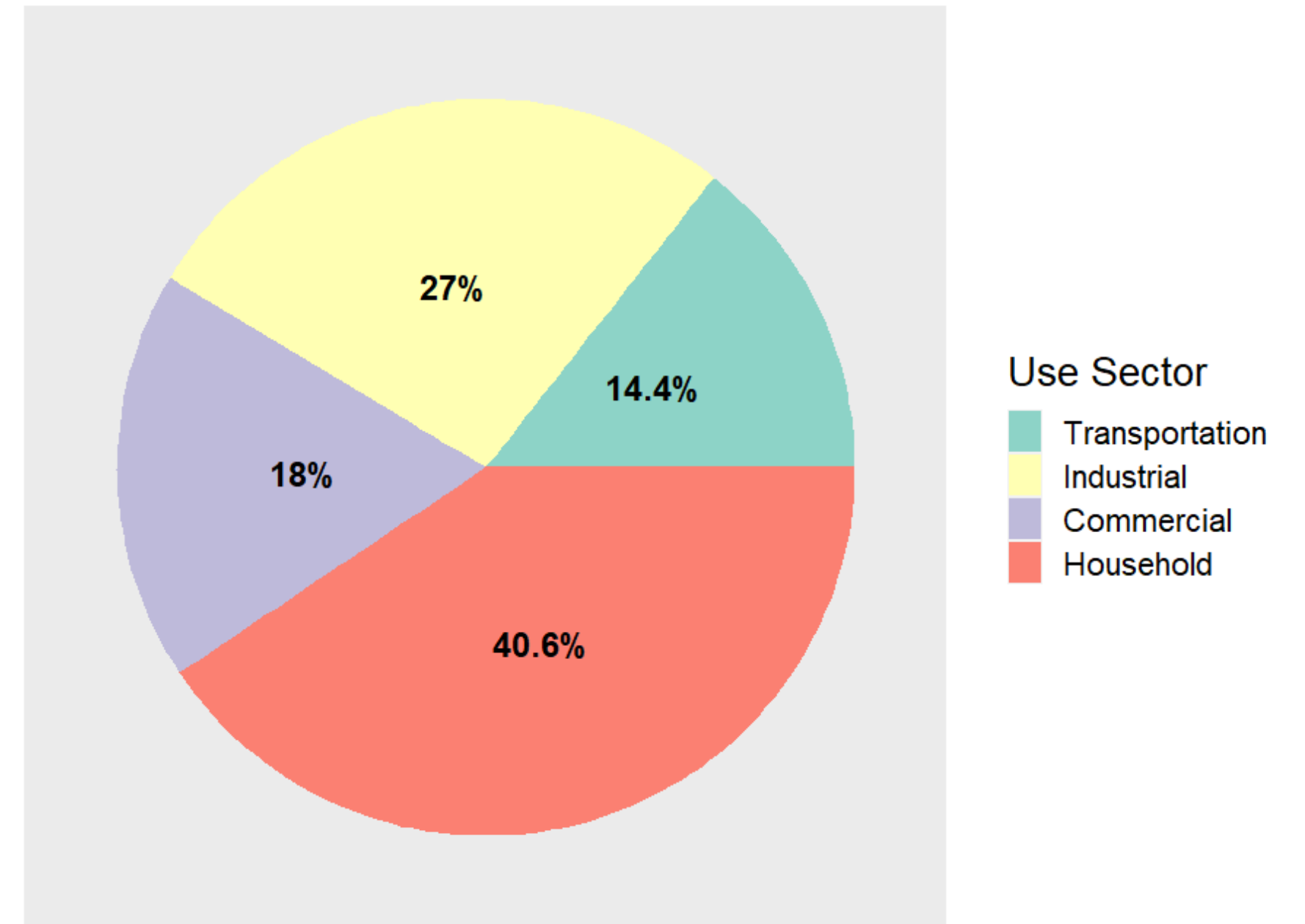
# Household Sector

# Who Emits CO<sub>2</sub>?

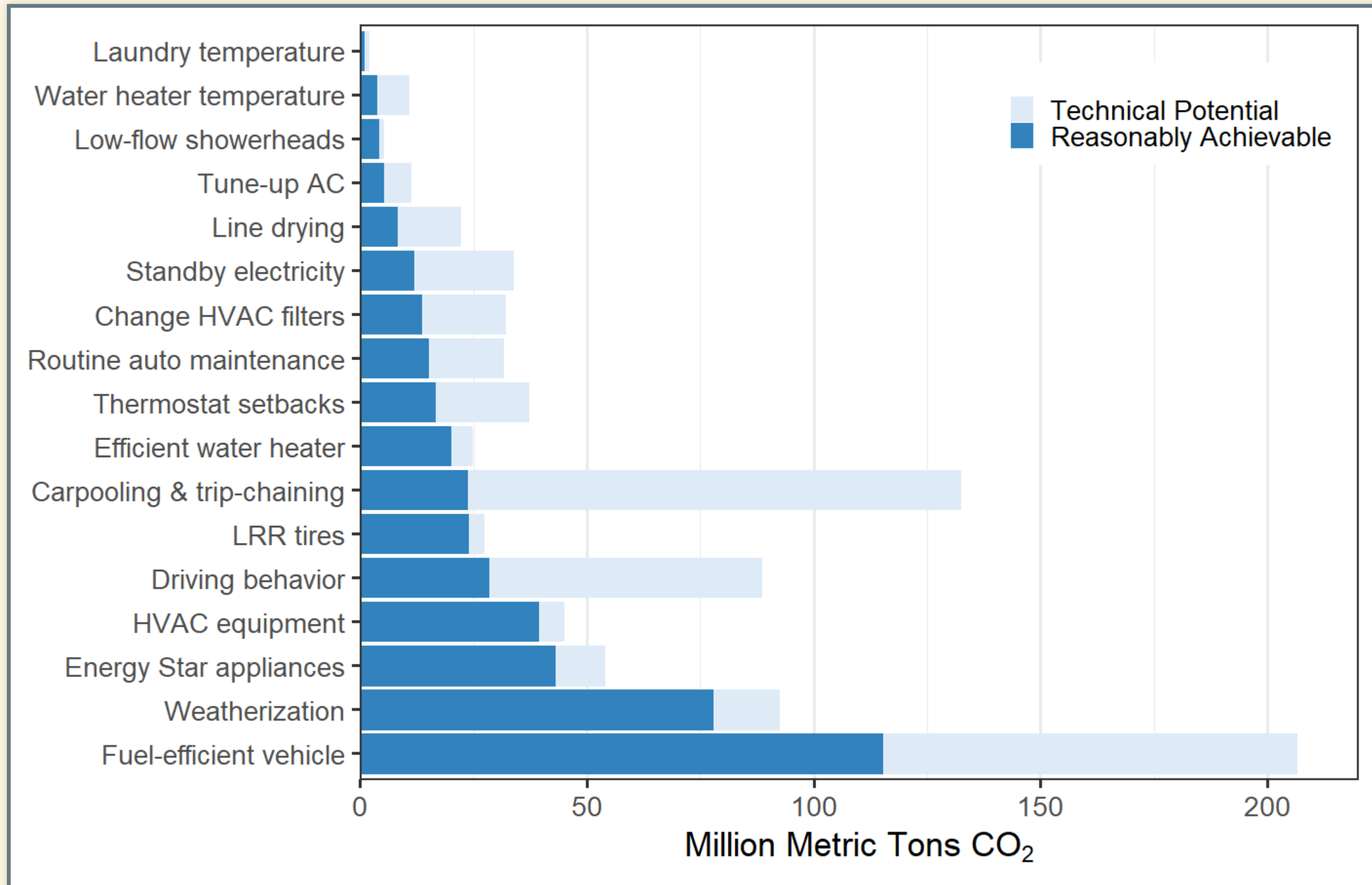
CO<sub>2</sub> emissions by sector of emitter



CO<sub>2</sub> emissions by sector of user

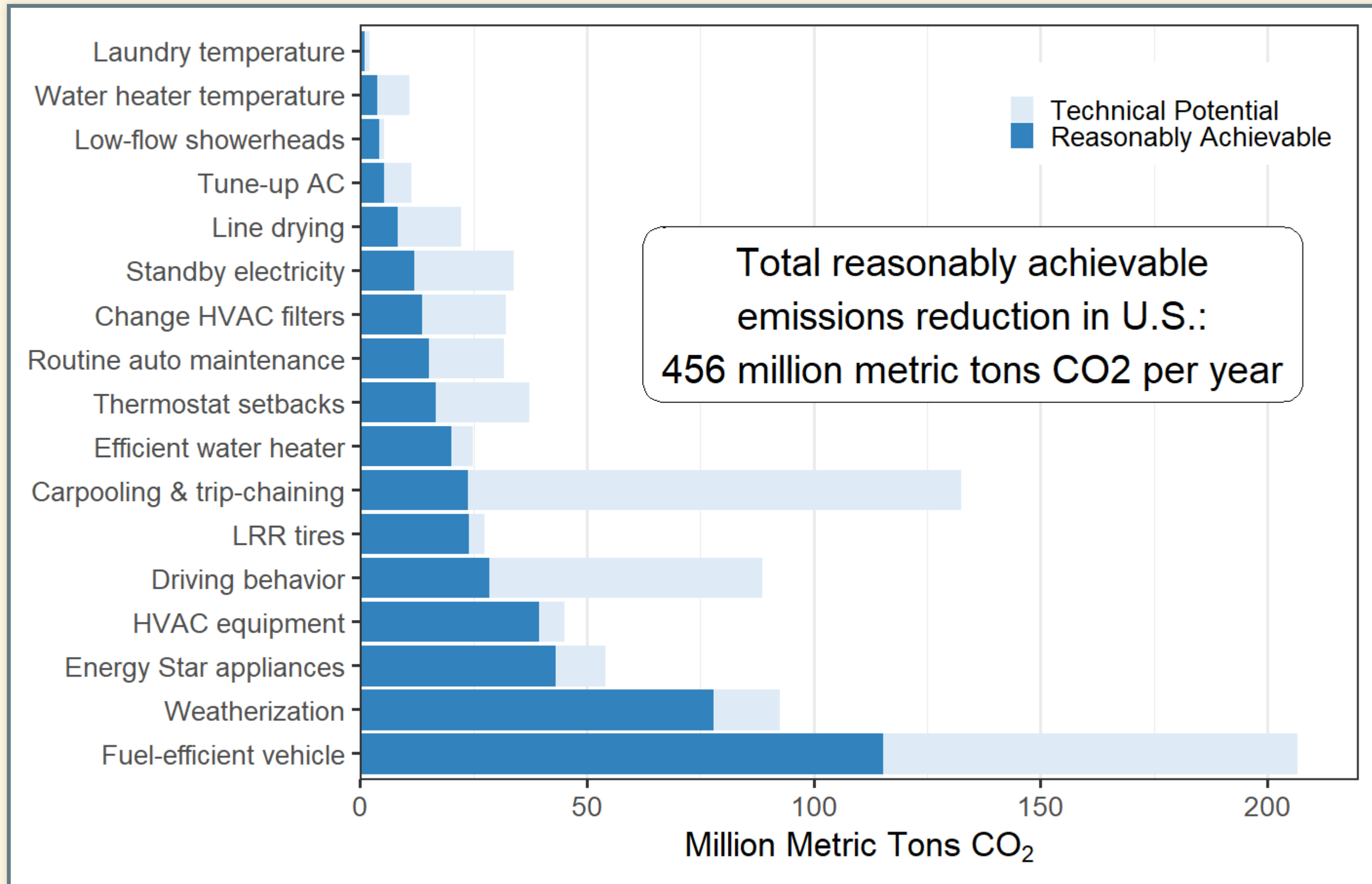


# Behavioral Wedge Analysis



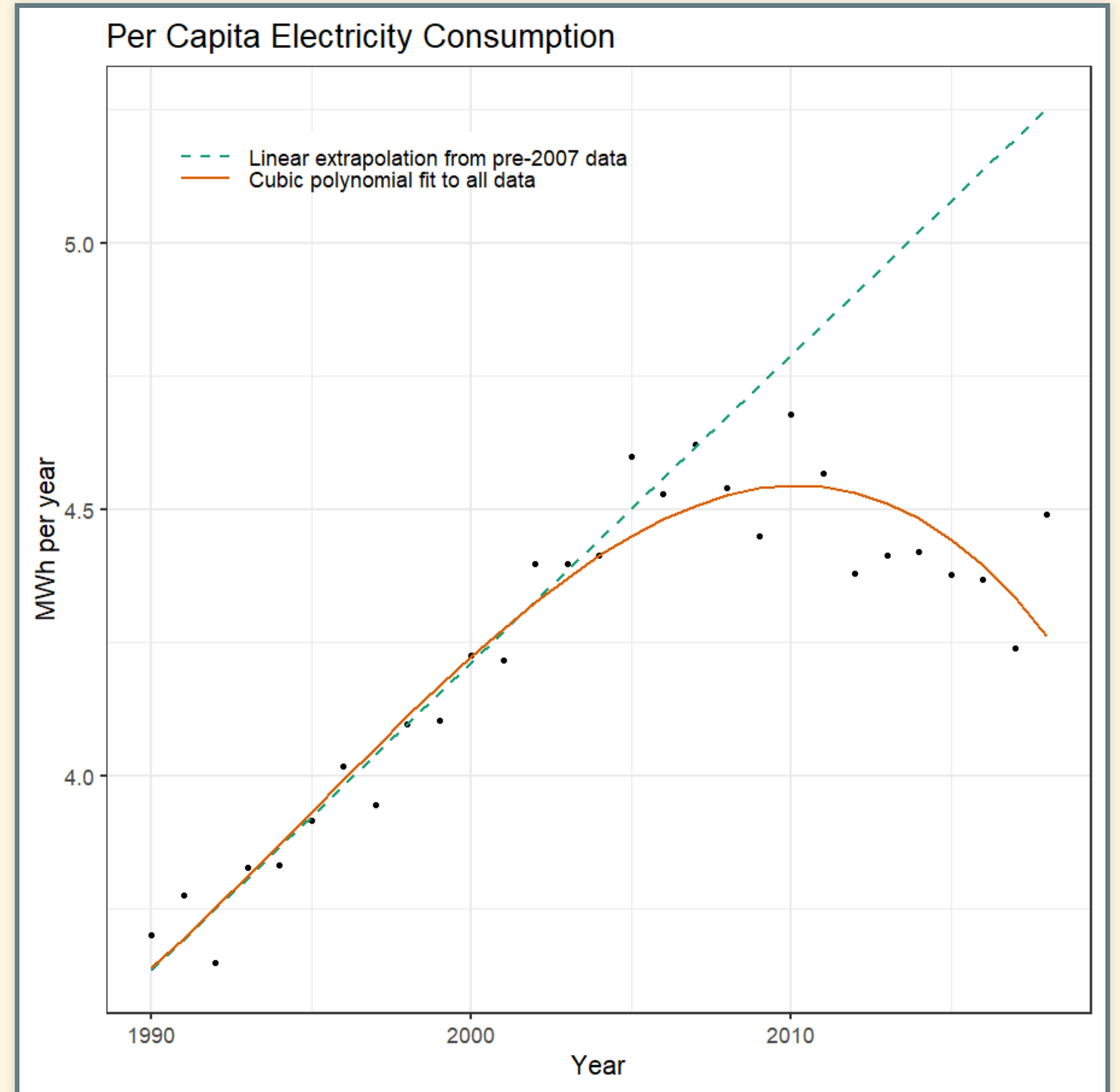


# Behavioral Wedge Analysis

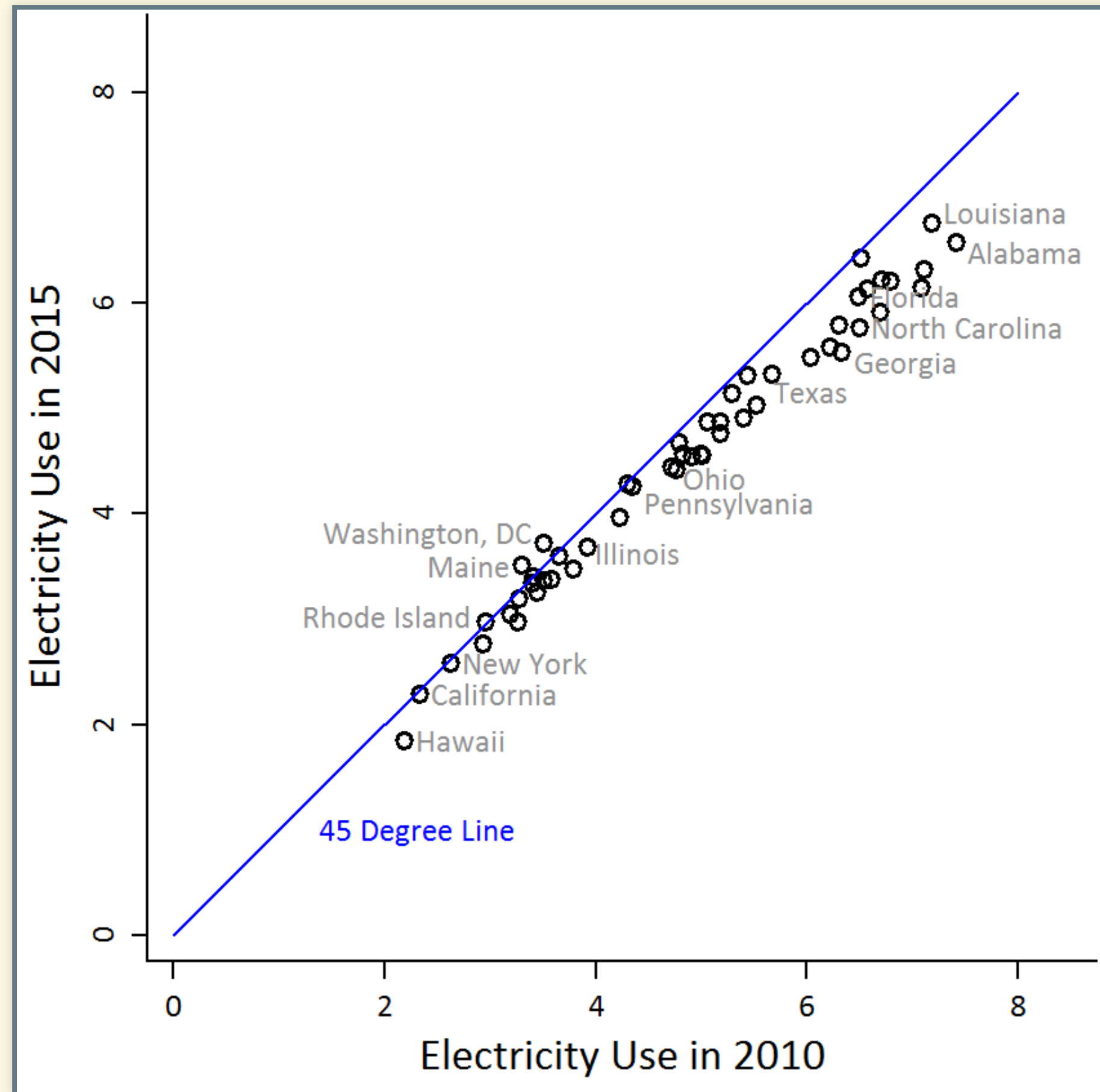


# Recent Developments: Household Electricity Use

- LED and CFL lighting saves consumers money & reduces greenhouse gas emissions
- Reduced household electricity use cut U.S. emissions by 130 million metric tons of CO<sub>2</sub>.



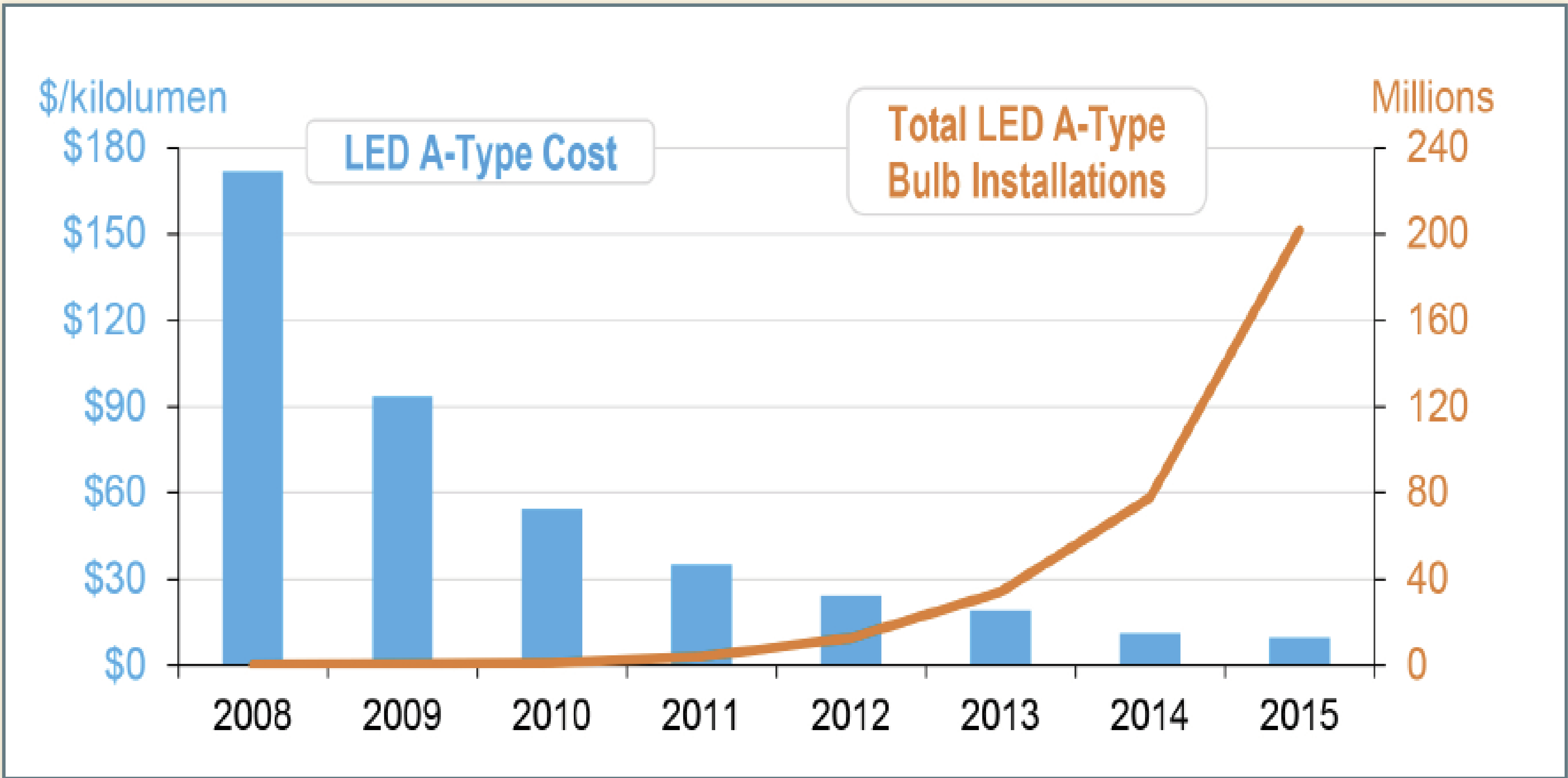
# Reductions in 48 States



# Private Governance

- 2007: WalMart sets and exceeds goal of selling 100 compact fluorescent light bulbs in one year.
  - Meets goal in 10 months
- 2011: WalMart launches competition among suppliers:
  - Best high-quality LED bulb under \$10: We will help you sell hundreds of millions!
- 2013: WalMart teams up with TCP to launch 60W equivalent bulb for less than \$9
- Replacing 5 most used bulbs in your house with LEDs will save around \$75/year

# LED Light Bulb Sales



# Conclusions

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- Private governance can likely reduce global emissions by more than 1 billion tons per year rapidly
- This isn't even close to solving the whole climate problem
- But it can help considerably, and buy time to enact other measures before it's too late.